Page 64,   line 4,   replace "Equally, other three" by --Similarly, three other--.

Page 68,   line 24,   replace "signal" by --signals--.

Page 69,   line 20,   replace "Thanking" by --Thanks--.

Page 70,   line 14,   replace "Equally, other three" by --Similarly, three other--.

Page 72,   line 27,   replace "supper" by --super--.

Page 75,   line 7,   replace "signal" by --signals--.

Page 79,   line 10,   replace "supper" by --super--.

Page 115,   line 16,   replace "It" by --There--;

             line 20,   replace "be no more" by --not be further--.

Page 116,   line 27,   replace "reproduce" by --reproduces--.

Page 117,   line 2,   replace "low" by --lower--;

             line 4,   after "inferior" insert --by--.

Page 118,   line 1,   replace "able to use" by --capable of being used--.

<u>IN THE CLAIMS</u>:

Please cancel claims 1-38 without prejudice or disclaimer to the subject matter therein. Please add new claims 39-49 as follows.

--39.   A signal transmission apparatus for transmitting a first data stream and a second data stream, said signal transmission apparatus comprising:

an error correction code (ECC) encoder operable to ECC encode at least one of the first and second data streams such that the at least one of the first and second data streams is an ECC encoded data stream;

a modulator operable to assign each data stream to a respective constellation in a signal space to produce modulated signals such that the number of signal points of the first data stream assigned in the signal space is different from the number of signal points of the second data stream assigned in the signal space, and the first data stream has data for demodulation including information representing the number of signal points of the second data stream in the signal space;

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an inverse Fast Fourier transformer operable to convert the modulated signals into a signal on a time axis to produce a transmission signal; and

a transmitter operable to transmit the transmission signal.

40.   A signal transmission apparatus according to claim 39, wherein said error correction code encoder is operable to ECC encode the first data stream with a first ECC encoding and to ECC encode the second data stream with a second ECC encoding that is different from the first ECC encoding.

41.   A signal receiving apparatus comprising:

a receiver operable to receive a received signal having information of a first data stream and a second data stream, wherein the number of signal points of the first data stream assigned in a signal space is different from the number of signal points of the second data stream assigned in the signal space, and the first data stream has data for demodulation including information representing the number of signal points of the second data stream in the signal space;

a Fast Fourier transformer operable to convert the received signal into a signal on a frequency axis;

a demodulator operable to demodulate the signal on the frequency axis from said Fast Fourier transformer and to demodulate the second data stream according to the data for demodulation in the first data stream; and

an error correction code (ECC) decoder operable to ECC decode an output of said demodulator to produce the first and second data streams.

42.   A signal receiving apparatus according to claim 41, wherein said error correction code decoder is operable to ECC decode the first data stream with a first ECC decoding and to ECC decode the second data stream with a second ECC decoding that is different from the first ECC decoding.

43.   A signal transmission system for transmitting and receiving a first data stream and a second data stream, said signal transmission system comprising:

a signal transmission apparatus for transmitting the first and second data streams, said signal transmission apparatus including an error correction code (ECC) encoder operable to ECC encode at least one of the first and second data streams such that the at least one of the first and second data streams is an ECC encoded data stream, a modulator operable to assign each of the first and second data streams to a respective constellation in a signal space to produce modulated signals such that the number of signal points of the first data stream assigned in the signal space is different from the number of signal points of the second data stream assigned in the signal space, and the first data stream has data for demodulation including information representing the number of signal points of the second data stream in the signal space, an inverse Fast Fourier transformer operable to convert the modulated signals into a signal on a time axis to produce a transmission signal, and a transmitter operable to transmit the transmission signal; and

a signal receiving apparatus including a receiver operable to receive a received signal having information of the first and second data streams, a Fast Fourier transformer operable to convert the received signal into a signal on a frequency axis, and a demodulator operable to demodulate the signal on the frequency axis from said Fast Fourier transformer and to demodulate the second data stream according to the data for demodulation in the first data stream, and an error correction code (ECC) decoder operable to ECC decode an output of said demodulator to produce the first and second data streams.

44.   A signal transmission system according to claim 43, wherein said error correction code encoder is operable to ECC encode the first data stream with a first ECC encoding and to ECC encode the second data stream with a second ECC encoding that is different from the first ECC encoding.

45.   A signal transmission system according to claim 43, wherein said error correction code decoder is operable to ECC decode the first data stream with a first ECC decoding and to ECC

decode the second data stream with a second ECC decoding that is different from the first ECC decoding.

46.   A signal transmission method for transmitting a first data stream and a second data stream, said signal transmission method comprising:

error correction code (ECC) encoding at least one of the first and second data streams such that the at least one of the first and second data streams is an ECC encoded data stream;

assigning each data stream to a respective constellation in a signal space to produce modulated signals such that the number of signal points of the first data stream assigned in the signal space is different from the number of signal points of the second data stream assigned in the signal space, and the first data stream has data for demodulation including information representing the number of signal points of the second data stream in the signal space;

inverse Fast Fourier transforming the modulated signals so as to convert the modulated signals into a signal on a time axis to produce a transmission signal; and

transmitting the transmission signal.

47.   A signal transmission method according to claim 46, wherein said error correction code encoding comprises ECC encoding the first data stream with a first ECC encoding and ECC encoding the second data stream with a second ECC encoding that is different from the first ECC encoding.

48.   A signal receiving method comprising:

receiving a received signal having information of a first data stream and a second data stream, wherein the number of signal points of the first data stream assigned in a signal space is different from the number of signal points of the second data stream assigned in the signal space, and the first data stream has data for demodulation including information representing the number of signal points of the second data stream in the signal space;

Fast Fourier transforming the received signal so as to convert the received signal into a signal on a frequency axis;

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